

ABSTRACT OF THE DISCLOSURE

An optical device includes a transparent material layer having a desired curved surface configuration, a layer including a variable refractive index material having a dielectric constant anisotropy and having a property in which a sign of a difference $\Delta\epsilon$ in dielectric constant due to the anisotropy is reversed at driving frequencies f_1 and f_2 , at least two transparent electrodes arranged to sandwich the transparent material layer and the layer including the variable refractive index material, and a driving device supplying a voltage including the driving frequencies f_1 and f_2 between the transparent electrodes.